In the Specification:

Please amend the specification as shown:

Please delete the paragraph on page 26, line 5, through page 27, line 1, and replace it with the following paragraph:

Example 1A - Preparation of Plasmid pCFD30

Plasmid pCFD30 is a recombinant plasmid produced by inserting an oligoduplex of formula

CCGTGCA**GAATTCGAGGTCG**ACGGATCCGG **(nucleotides 4-34 of SEQ ID NO: 1)**

GGCACGT**CTTAAGCTCCAGC**TGCCTAGGCC **(complementary sequence)**

containing a single recognition site (identified in **bold typeface**) for EcoR124I (the molecular motor) (Taylor *et al.*, Substrate Recognition and Selectivity in the Type IC DNA Modification Methylase M.EcoR124I in Nucleic Acids Research 21 (21) (1993)) into the unique SmaI site of pTZ19R (Mead *et al.*, Single-Stranded DNA 'Blue' T7 Promoter Plasmids: A Versatile Tandem Promoter System for Cloning and Protein Engineering in Protein Engineering 1 67-74 (1986)) using standard methods described by Maniatis *et al* in Molecular Cloning: A Laboratory Manual, Cold Harbor Laboratory, New York (1982). The DNA sequence at the *Sma*I site (below, identified in *italics*) of pCFD30 was found to be *CCCCCG*TGCA**GAATTCGAGGTCG**ACGGATCCGG*GGG* **(SEQ ID NO: 1)**, which shows the orientation of the EcoR124I recognition sequence in the plasmid.

Please delete the paragraph on page 29, line 18, through page 30, line 5, and replace it with the following paragraph:

Example 2A - Preparation of DNA-bound Chemiluminescent Enzyme

Plasmid pCFD30 (as defined in Example 1A) was linearised with *Xmn*I and ligated to an excess of oligoduplex (CAGATG**CACGTG**AG*TCGC) **(SEQ ID NO: 7)** containing a *Xho*I site (identified by **bold typeface**) and a single biotin molecule (obtained from Cruachem Ltd, Glasgow) linked to thymine (*T) to produce pCFD30-biotin. Recombinants were identified by *Xho*I cleavage. The presence of a single copy of the oligoduplex was produced by *Xho*I cleavage followed by religation and confirmed by DNA sequence analysis of the resulting recombinants.

Please delete the paragraph on page 32, lines 9-24, and replace it with the following paragraph:

Example 3 - Surface-Attached Molecular Motor

Plasmid pCFD30 DNA was copied using PCR (using Universal primer with biotin attached at the 5' -end (available from Cruachem Ltd., Todd Campus, West of Scotland Science Park, Acre Road, Glasgow G20 0UA) and a primer overlapping the unique *Xmn*I site: GCCCCGAAGAACGTTTTCC) **(SEQ ID NO: 4)** to yield a linear DNA fragment with biotin attached at one specific end (near the recognition site for the R_1 enzyme). The PCR product was attached to the streptavidin-coated chip of an SPR (surface plasmon resonance) machine (Biacore X available from Biacore AB, Meadway Technology Park, Stevenage, Herts., UK). Attachment was monitored using SPR to confirm that no more PCR product could bind to the chip. Biotin was attached to another oligoduplex (as in Example 2A), which was ligated to the other end of the chip-bound PCR product; again, attachment was monitored using the SPR.

Please delete the paragraph on page 34, line 14, through page 35, line 4, and replace it with the following paragraph:

Example 4A - Preliminary Surface-Attachment of DNA

An oligonucleotide (CTACGGTACCGAAACGCGTGTCGGGCCCGCGAAGCTTGC$_x$) **(SEQ ID NO: 5)** carrying a biotin molecule ($_x$) at one end was synthesised by Cruachem. Attachment of the oligo to the surface was monitored by SPR. This oligo was annealed to a complementary oligo (CATGGATGCCATGGCTTTGCGCACAGCCCGGGCGCTTCGAACG) **(SEQ ID NO: 6)** to give an oligoduplex with a biotin attached and with a suitable 6-base-pair "sticky-end" at the 3' end (biotin end) to allow ligation of another DNA molecule. Annealing of this second oligo was also monitored by SPR. The running buffer (buffer 1) used was 10mM Tris-HCl (pH8), 10mM $MgCl_2$, 100mM NaCl, 1mM DTT

Please delete the paragraph on page 36, line 9-24, and replace it with the following paragraph:

Example 4C - Experiments using Linear DNA

Plasmid pCFD30 DNA was copied using PCR (using Universal primer available from cruachem Ltd., Todd Campus, West of Scotland Science Park, Acre Rod, Glasgow G20 0UA) and a primer overlapping the unique *Xmn*I site: GCCCCGAAGAACGTTTTCC) **(SEQ ID NO: 4)** to yield a linear DNA fragment. This linear DNA was cleaved with *Kpn*I to produce a suitable complementary "sticky-end". The PCR product was attached to the streptavidin-coated chip of an SPR by ligation to the oligoduplexes attached to the surface of the chip using standard procedures described in Maniatis (*ibid*, Example 1). The chip was washed free of ligase any any unligated linear DNA was removed using 1% SDS in the buffer detailed above (this can also be used to remove *Eco*R124I enzyme from the DNA on the chip). The data from the SPR showed ligation was successful.